

What is claimed is:

1. A method for manufacturing elongate structural parts for automobile body construction, the structural parts having at least in regions thereof a high strength and a minimum ductility of 5 % to 10 %, the structural parts configured to perform safety functions within an automobile body, the method comprising the steps of:

shaping a blank of hardenable steel in a soft state to form an elongate structural part;

positioning the elongate structural part in an upright position;

arranging an induction element, moveable in a longitudinal direction of the elongate structural part, such that the induction element surrounds the elongate structural part;

at least partially heating the elongate structural part by the induction element to an austenitizing temperature for hardening the elongate structural part by moving the induction element in the longitudinal direction from a bottom to a top of the elongate structural part and by following a contour of the elongate structural part;

cooling the elongate structural part by a cooling unit that follows the induction element in the longitudinal direction.

2. The method according to claim 1, wherein the cooling unit and the induction element are position-adjustable relative to one another.

3. The method according to claim 1, wherein the cooling unit is comprised of several cooling elements arranged in a circumferential direction of the elongate structural part.

4. The method according to claim 3, wherein the cooling elements are position-adjustable relative to one another.

5. The method according to claim 1, comprising the step of operating the induction element at high frequency during the step of heating.

6. The method according to claim 1, comprising the step of subjecting the elongate structural part to a liquid cooling medium in the region of the cooling unit during the step of cooling.

7. The method according to claim 1, comprising the step of subjecting the elongate structural part to a mist of a liquid cooling medium in the region of the cooling unit

during the step of cooling.

8. The method according to claim 1, comprising the step of subjecting the elongate structural part to a gaseous cooling medium in the region of the cooling unit during the step of cooling.

9. The method according to claim 1, comprising the step of subjecting the elongate structural part in the region of the cooling unit first to a gaseous cooling medium or a mist of a liquid cooling medium and subsequently to a liquid cooling medium during the step of cooling.

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